

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-93 (Canceled).

Claim 94 (Currently Amended): A signal recorded on a recording medium, said signal comprising:

video information representative of a coded video program; and

control information for displaying a plurality of versions of said video program, said control information including, for each of said versions, address information indicative of the locations of portions of said video information that are sequentially accessed to generate said version;

wherein said video information and said control information are in the form of packets, and a control information packet is multiplexed with video information packets so that said control information packet is positioned in a segment directly following an entry point of said video information, said segment also including an independently coded I-frame first after the entry point.

Claim 95 (Previously Presented): The signal according to claim 94, wherein said video information includes intra-coded pictures and inter-coded pictures.

Claim 96 (Previously Presented): The signal according to claim 94, wherein said address information is indicative of entry points for at least one of said versions.

Claim 97 (Previously Presented): The signal according to claim 94, wherein said control information includes a start address and an end address for at least one of said versions.

Claim 98 (Previously Presented): The signal according to claim 94, wherein said control information includes playtime information for at least one of said versions.

Claim 99 (Previously Presented): The signal according to claim 94, wherein at least one of said versions is generated according to a rating level.

Claim 100 (Currently Amended): A recording method, comprising the steps of:
multiplexing video information and control information to generate multiplexed information, said video information being representative of a coded video program, and said control information being operable to display a plurality of versions of said video program and including, for each of said versions, address information indicative of the locations of portions of said video information that are sequentially accessed to generate said version; and
recording said multiplexed information onto a recording medium;
wherein said video information and said control information are in the form of packets, and a control information packet is multiplexed with video information packets so that said control information packet is positioned in a segment directly following an entry point of said video information, said segment also including an independently coded I-frame first after the entry point.

Claim 101 (Previously Presented): The method according to claim 100, wherein said video information includes intra-coded pictures and inter-coded pictures.

Claim 102 (Previously Presented): The method according to claim 100, wherein said address information is indicative of entry points for at least one of said versions.

Claim 103 (Previously Presented): The method according to claim 100, wherein said control information includes a start address and an end address for at least one of said versions.

Claim 104 (Previously Presented): The method according to claim 100, wherein said control information includes playtime information for at least one of said versions.

Claim 105 (Previously Presented): The method according to claim 100, wherein at least one of said versions is generated according to a rating level.

Claim 106 (Currently Amended): A recording apparatus, comprising:
a multiplexer for multiplexing video information and control information to generate multiplexed information, said video information being representative of a coded video program, and said control information being operable to display a plurality of versions of said video program and including, for each of said versions, address information indicative of the locations of portions of said video information that are sequentially accessed to generate said version; and

a recorder for recording said multiplexed information onto a recording medium;
wherein said video information and said control information are in the form of packets, and a control information packet is multiplexed with video information packets so that said control information packet is positioned in a segment directly following an entry

point of said video information, said segment also including an independently coded I-frame first after the entry point.

Claim 107 (Previously Presented): The apparatus according to claim 106, wherein said video information includes intra-coded pictures and inter-coded pictures.

Claim 108 (Previously Presented): The apparatus according to claim 106, wherein said address information is indicative of entry points for at least one of said versions.

Claim 109 (Previously Presented): The apparatus according to claim 106, wherein said control information includes a start address and an end address for at least one of said versions.

Claim 110 (Previously Presented): The apparatus according to claim 106, wherein said control information includes playtime information for at least one of said versions.

Claim 111 (Previously Presented): The apparatus according to claim 106, wherein at least one of said versions is generated according to a rating level.

Claim 112 (Currently Amended): A reproduction method, comprising the steps of:
reproducing multiplexed information from a recording medium, said multiplexed information including video information and control information, said video information being representative of a coded video program, and said control information being operable to display a plurality of versions of said video program and including, for each of said

versions, address information indicative of the locations of portions of said video information that are sequentially accessed to generate said version; and

demultiplexing said multiplexed information;

wherein said video information and said control information are in the form of packets, and a control information packet has been multiplexed with video information packets so that said control information packet is positioned in a segment directly following an entry point of said video information, said segment also including an independently coded I-frame first after the entry point.

Claim 113 (Previously Presented): The method according to claim 112, wherein said video information includes intra-coded pictures and inter-coded pictures.

Claim 114 (Previously Presented): The method according to claim 112, wherein said address information is indicative of entry points for at least one of said versions.

Claim 115 (Previously Presented): The method according to claim 112, wherein said control information includes a start address and an end address for at least one of said versions.

Claim 116 (Previously Presented): The method according to claim 112, wherein said control information includes playtime information for at least one of said versions.

Claim 117 (Previously Presented): The method according to claim 112, wherein at least one of said versions is generated according to a rating level.

Claim 118 (Currently Amended): A reproduction apparatus, comprising:

a reproducer for reproducing multiplexed information from a recording medium, said multiplexed information including video information and control information, said video information being representative of a coded video program, and said control information being operable to display a plurality of versions of said video program and including, for each of said versions, address information indicative of the locations of portions of said video information that are sequentially accessed to generate said version; and

a demultiplexer for demultiplexing said multiplexed information;

wherein said video information and said control information are in the form of packets, and a control information packet has been multiplexed with video information packets so that said control information packet is positioned in a segment directly following an entry point of said video information, said segment also including an independently coded I-frame first after the entry point.

Claim 119 (Previously Presented): The apparatus according to claim 118, wherein said video information includes intra-coded pictures and inter-coded pictures.

Claim 120 (Previously Presented): The apparatus according to claim 118, wherein said address information is indicative of entry points for at least one of said versions.

Claim 121 (Previously Presented): The apparatus according to claim 118, wherein said control information includes a start address and an end address for at least one of said versions.

Claim 122 (Previously Presented): The apparatus according to claim 118, wherein said control information includes playtime information for at least one of said versions.

Claim 123 (Previously Presented): The apparatus according to claim 118, wherein wherein at least one of said versions is generated according to a rating level.

Claim 124 (Currently Amended): A computer readable recording medium on which is recorded a computer program for recording a signal on a recording medium by:

 multiplexing video information and control information to generate multiplexed information, said video information being representative of a coded video program, and said control information being operable to display a plurality of versions of said video program and including, for each of said versions, address information indicative of the locations of portions of said video information that are sequentially accessed to generate said version; and

 recording said multiplexed information onto the recording medium;

 wherein said video information and said control information are in the form of packets, and a control information packet is multiplexed with video information packets so that said control information packet is positioned in a segment directly following an entry point of said video information, said segment also including an independently coded I-frame first after the entry point.

Claim 125 (Previously Presented): The computer readable recording medium according to claim 124, wherein said video information includes intra-coded pictures and inter-coded pictures.

Claim 126 (Previously Presented): The computer readable recording medium according to claim 124, wherein said address information is indicative of entry points for at least one of said versions.

Claim 127 (Previously Presented): The computer readable recording medium according to claim 124, wherein said control information includes a start address and an end address for at least one of said versions.

Claim 128 (Previously Presented): The computer readable recording medium according to claim 124, wherein said control information includes playtime information for at least one of said versions.

Claim 129 (Currently Amended): A computer readable recording medium on which is recorded a computer program for reproducing a signal from a recording medium by:

reproducing multiplexed information from the recording medium, said multiplexed information including video information and control information, said video information being representative of a coded video program, and said control information being operable to display a plurality of versions of said video program and including, for each of said versions, address information indicative of the locations of portions of said video information that are sequentially accessed to generate said version; and

demultiplexing said multiplexed information;

wherein said video information and said control information are in the form of packets, and a control information packet has been multiplexed with video information packets so that said control information packet is positioned in a segment directly following

an entry point of said video information, said segment also including an independently coded I-frame first after the entry point.

Claim 130 (Previously Presented): The computer readable recording medium according to claim 129, wherein said video information includes intra-coded pictures and inter-coded pictures.

Claim 131 (Previously Presented): The computer readable recording medium according to claim 129, wherein said address information is indicative of entry points for at least one of said versions.

Claim 132 (Previously Presented): The computer readable recording medium according to claim 129, wherein said control information includes a start address and an end address for at least one of said versions.

Claim 133 (Previously Presented): The computer readable recording medium according to claim 129, wherein said control information includes playtime information for at least one of said versions.

Claim 134 (Previously Presented): The computer readable recording medium according to claim 129, wherein at least one of said versions is generated according to a rating level.

Claim 135 (Currently Amended): A processor readable information carrier on which at least one program composed of video data is stored, said video data being partitioned into a

plurality of sections, and each said section including path information corresponding to one or more program versions, whereby said sections may be reproduced from said carrier in a linked fashion in a plurality of combinations to generate respective ones of said program versions, and whereby, for a program version being reproduced from said carrier, said path information includes positional information ~~positional information~~ of a previous section entry point and a next section start address of a next section to be reproduced following reproduction of a currently reproducing section, said previous section entry point indicating entry to a first following independently coded I-frame.

Claim 136 (Previously Presented): A processor readable information carrier as set forth in claim 135, wherein for a program version being reproduced from said carrier, said path information includes positional information indicative of a section end of a currently reproducing section.

Claim 137 (Previously Presented): A processor readable information carrier as set forth in claim 135, wherein for a program version being reproduced from said carrier, said path information includes positional information indicative of a section start of a currently reproducing section.

Claim 138 (Previously Presented): A processor readable information carrier as set forth in claim 135, wherein for a program version being reproduced from said carrier, said path information includes positional information indicative of a section end of a last reproduced section.

Claim 139 (Currently Amended): A recording method for recording onto an information carrier at least one program composed of video data, comprising the steps of:
partitioning said video data into a plurality of sections; and
including in each said section path information corresponding to one or more program versions,

whereby said sections may be reproduced from said carrier in a linked fashion in a plurality of combinations to generate respective ones of said program versions, and

whereby, for a program version being reproduced from said carrier, said path information includes positional information of a previous section entry point and a next section start address of a next section to be reproduced following reproduction of a currently reproducing section, said previous section entry point indicating entry to a first following independently coded I-frame.

Claim 140 (Previously Presented): A recording method as set forth in claim 139, wherein for a program version being reproduced from said carrier, said path information includes positional information indicative of a section end of a currently reproducing section.

Claim 141 (Previously Presented): A recording method as set forth in claim 139, wherein for a program version being reproduced from said carrier, said path information includes positional information indicative of a section start of a currently reproducing section.

Claim 142 (Previously Presented): A recording method as set forth in claim 140, wherein for a program version being reproduced from said carrier, said path information includes positional information indicative of a section end of a last reproduced section.

Claim 143 (Currently Amended): A recording apparatus recording onto an information carrier at least one program composed of video data, comprising:

means for partitioning said video data into a plurality of sections; and

means for including in each said section path information corresponding to one or more program versions,

whereby said sections may be reproduced from said carrier in a linked fashion in a plurality of combinations to generate respective ones of said program versions, and

whereby, for a program version being reproduced from said carrier, said path information includes positional information of a previous section entry point and a next section start address of a next section to be reproduced following reproduction of a currently reproducing section, said previous section entry point indicating entry to a first following independently coded I-frame.

Claim 144 (Previously Presented): A recording apparatus as set forth in claim 143, wherein for a program version being reproduced from said carrier, said path information includes positional information indicative of a section end of a currently reproducing section.

Claim 145 (Previously Presented): A recording apparatus as set forth in claim 143, wherein for a program version being reproduced from said carrier, said path information includes positional information indicative of a section start of a currently reproducing section.

Claim 146 (Previously Presented): An recording apparatus as set forth in claim 143, wherein for a program version being reproduced from said carrier, said path information includes positional information indicative of a section end of a last reproduced section.

Claim 147 (Currently Amended): A reproducing method for reproducing from an information carrier at least one program composed of video data, said video data having been recorded onto said information carrier by partitioning said video data into a plurality of sections and including in each said section path information corresponding to one or more program versions, said method comprising the steps of:

reading a plurality of said sections from said information carrier; and

linking said sections read from said information carrier to generate at least one of said program versions,

whereby said sections may be reproduced from said carrier in a linked fashion in a plurality of combinations to generate respective ones of said program versions, and

whereby, for a program version being reproduced from said carrier, said path information includes positional information of a previous section entry point and a next section start address of a next section to be reproduced following reproduction of a currently reproducing section, said previous section entry point indicating entry to a first following independently coded I-frame.

Claim 148 (Previously Presented): A reproducing method as set forth in claim 147, wherein for a program version being reproduced from said carrier, said path information includes positional information indicative of a section end of a currently reproducing section.

Claim 149 (Previously Presented): A reproducing method as set forth in claim 147, wherein for a program version being reproduced from said carrier, said path information includes positional information indicative of a section start of a currently reproducing section.

Claim 150 (Previously Presented): A reproducing method as set forth in claim 147, wherein for a program version being reproduced from said carrier, said path information includes positional information indicative of a section end of a last reproduced section.

Claim 151 (Currently Amended): A reproducing apparatus for reproducing from an information carrier at least one program composed of video data, said video data having been recorded onto said information carrier by partitioning said video data into a plurality of sections and including in each said section path information corresponding to one or more program versions, said apparatus comprising:

means for reading a plurality of said sections from said information carrier; and

means for linking said sections read from said information carrier to generate at least one of said program versions,

whereby said sections may be reproduced from said carrier in a linked fashion in a plurality of combinations to generate respective ones of said program versions, and

whereby, for a program version being reproduced from said carrier, said path information includes positional information of a previous section entry point and a next section start address of a next section to be reproduced following reproduction of a currently reproducing section, said previous section entry point indicating entry to a first following independently coded I-frame.

Claim 152 (Previously Presented): A reproducing apparatus as set forth in claim 151, wherein for a program version being reproduced from said carrier, said path information includes positional information indicative of a section end of a currently reproducing section.

Claim 153 (Previously Presented): A reproducing apparatus as set forth in claim 151, wherein for a program version being reproduced from said carrier, said path information includes positional information indicative of a section start of a currently reproducing section.

Claim 154 (Previously Presented): A reproducing apparatus as set forth in claim 151, wherein for a program version being reproduced from said carrier, said path information includes positional information indicative of a section end of a last reproduced section.

Claim 155 (Previously Presented): The signal according to claim 94, wherein the address information includes a previous portion entry point information and a next portion start address information.

Claim 156 (Previously Presented): The signal according to claim 100, wherein the address information includes a previous portion entry point information and a next portion start address information.

Claim 157 (Previously Presented): The signal according to claim 106, wherein the address information includes a previous portion entry point information and a next portion start address information.

Claim 158 (Previously Presented): The signal according to claim 112, wherein the address information includes a previous portion entry point information and a next portion start address information.

Claim 159 (Previously Presented): The signal according to claim 118, wherein the address information includes a previous portion entry point information and a next portion start address information.

Claim 160 (Previously Presented): The signal according to claim 124, wherein the address information includes a previous portion entry point information and a next portion start address information.

Claim 161 (Previously Presented): The signal according to claim 129, wherein the address information includes a previous portion entry point information and a next portion start address information.